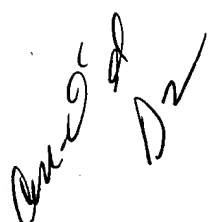


SCHNEIDER et al  
Serial No. 09/002,710

 comprising SF<sub>6</sub>, C<sub>4</sub>F<sub>8</sub>, C<sub>4</sub>F<sub>10</sub>, or CF<sub>4</sub>, and said microballoons comprising a polymer membrane wall, the method comprising:

forming the microballoons in the presence of at least one physiologically acceptable fluorinated gas or filling the microballoons with at least one physiologically acceptable fluorinated gas. --

### REMARKS

Schneider et al's assignee, Bracco International B.V., is seeking to add this application to Interference No. 103,880, and substitute this application for the Yan et al. application (08/637,346), which is also assigned to Bracco International B.V., in Interference No. 103,881, in motions filed concurrently herewith. These two interferences are currently pending. Preliminary motions filed in both of the aforementioned interferences by Schneider et al. and Yan et al. also seek to add this application to other, new interferences. Applicants comply with 37 C.F.R. § 1.607 with the motions referred to above.

New claims 50-97 are supported in Applicants' specification as follows:

Support for new claim 50 is found throughout the '710 specification and claims as filed with the original specification (hereinafter "as first filed") (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The "physiologically acceptable gas" is

disclosed both generally and with specific examples on page 11, in examples 4, 5 and 6 and in claims 1 and 3 as first filed.

Support for new claim 51 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The "physiologically acceptable gas" is disclosed both generally and with specific examples on page 11, in examples 4, 5 and 6 and in claims 1 and 3 as first filed and the "halogenated hydrocarbon" is disclosed at page 11 ("halogenated hydrocarbon"), in examples 4, 5, 6 as first filed and claims 1 and 3 as first filed.

Support for new claim 52 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The "physiologically acceptable fluorinated gas" is disclosed both generally and with specific examples on page 11, in examples 4, 5 and 6 and in claims 1 and 3 as first filed and the "freon" is disclosed at page 11 ("freon"), in examples 4, 5, 6 as first filed and claims 1 and 3 as first filed.

Support for new claim 53 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The  $\text{SF}_6$  is disclosed on page 11, in examples 4, 5 and 6 and in claims 1 and 3 as first filed.

Support for new claim 54 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The  $\text{C}_4\text{F}_8$  is disclosed at page 11(generally), example 5 and claims 1 and 3 as first filed.

Support for new claim 55 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The  $\text{C}_4\text{F}_{10}$  is disclosed at page 11 (generally), example 5 and claims 1 and 3 as first filed.

Support for new claim 56 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The  $\text{CF}_4$  is disclosed at page 11 (generally), examples 4, 5 and 6 and claims 1 and 3 as first filed.

Support for new claim 57 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The  $\text{SF}_6$ ,  $\text{C}_4\text{F}_8$ ,  $\text{C}_4\text{F}_{10}$ , or  $\text{CF}_4$  are disclosed at page 11 (generally) and claims 1 and 3 as first filed.

Support for new claim 58 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The "physiologically acceptable fluorinated gas" is disclosed both generally and with specific examples on page 11, in examples 1, 2 and 7 and in claims 1 and 3 as first filed.

Support for new claim 59 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The "physiologically acceptable gas" is disclosed both generally and with specific examples on page 11, in examples 1, 2 and 7 and in claims 1 and 3 as first filed and "halogenated hydrocarbon" is disclosed at page 11 ("halogenated hydrocarbon"), in claims 1 and 3 as first filed.

Support for new claim 60 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The "physiologically acceptable fluorinated gas" is disclosed both generally and with specific examples on page 11, in examples 1, 2 and 7 and in claims 1 and 3 as first filed and "freon" is disclosed at page 11 ("freon") claims 1 and 3 as first filed.

Support for new claim 61 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is

specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The  $\text{SF}_6$  is disclosed on page 11, in examples 1, 2 and 7 and in claims 1 and 3 as first filed.

Support for new claim 62 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The  $\text{C}_4\text{F}_8$  is disclosed at page 11(generally) and claims 1 and 3 as first filed.

Support for new claim 63 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The  $\text{C}_4\text{F}_{10}$  is disclosed at page 11 (generally) and claims 1 and 3 as first filed.

Support for new claim 64 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The  $\text{CF}_4$  is disclosed at page 11(generally), example 1, and claims 1 and 3 as first filed.

Support for new claim 65 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an

aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The SF<sub>6</sub>, C<sub>4</sub>F<sub>8</sub>, C<sub>4</sub>F<sub>10</sub>, or CF<sub>4</sub> are disclosed at page 11 (generally), and claims 1 and 3 as first filed.

Support for new claim 66 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The "physiologically acceptable fluorinated gas" is disclosed both generally and with specific examples on page 11, in examples 4, 5 and 6 and in claims 1 and 3 as first filed. The administration of the agent is disclosed in the specification (e.g., abstract; pp. 1, 2, 5-7, 8, 11, 12, 14-15; examples 8 and 9; claims 1 and 24-25). The imaging of the subject after the administration of the agent is also disclosed (e.g., p. 1 ("media adapted for injections into living bodies, e.g. for the purpose of ultrasonic echography . . . compositions are mostly usable as contrast agents in ultrasonic echography to image the inside of blood-stream vessels and other cavities of living beings, e.g. human patients and animals"), 2 ("injecting into blood stream of living bodies suspensions of gas microbubbles . . . in a carrier liquid will strongly reinforce ultrasonic echography imaging, thus aiding in the visualization of internal organs"), examples 8 and 9).

Support for new claim 67 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The "physiologically acceptable gas" is disclosed both generally and with specific examples on page 11, in examples 4, 5 and 6 and in claims 1 and 3 as first filed and the "halogenated hydrocarbon" is disclosed at page 11 ("halogenated hydrocarbon"), in examples 4, 5, 6 as first filed and claims 1 and 3 as first filed. The administration of the agent is disclosed in the specification (e.g., abstract; pp. 1, 2, 5-7, 8, 11, 12, 14-15; examples 8 and 9; claims 1 and 24-25). The imaging of the subject after the administration of the agent is also disclosed (e.g., p. 1 ("media adapted for injections into living bodies, e.g. for the purpose of ultrasonic echography . . . compositions are mostly usable as contrast agents in ultrasonic echography to image the inside of blood-stream vessels and other cavities of living beings, e.g. human patients and animals"), 2 ("injecting into blood stream of living bodies suspensions of gas microbubbles . . . in a carrier liquid will strongly reinforce ultrasonic echography imaging, thus aiding in the visualization of internal organs"), examples 8 and 9).

Support for new claim 68 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant



comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The "physiologically acceptable fluorinated gas" is disclosed both generally and with specific examples on page 11, in examples 4, 5 and 6 and in claims 1 and 3 as first filed and the "freon" is disclosed at page 11 ("freon"), in examples 4, 5, 6 as first filed and claims 1 and 3 as first filed. The administration of the agent is disclosed in the specification (e.g., abstract; pp. 1, 2, 5-7, 8, 11, 12, 14-15; examples 8 and 9; claims 1 and 24-25). The imaging of the subject after the administration of the agent is also disclosed (e.g., p. 1 ("media adapted for injections into living bodies, e.g. for the purpose of ultrasonic echography . . . compositions are mostly usable as contrast agents in ultrasonic echography to image the inside of blood-stream vessels and other cavities of living beings, e.g. human patients and animals"), 2 ("injecting into blood stream of living bodies suspensions of gas microbubbles . . . in a carrier liquid will strongly reinforce ultrasonic echography imaging, thus aiding in the visualization of internal organs"), examples 8 and 9).

Support for new claim 69 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The SF<sub>6</sub> is disclosed on page 11, in examples 4, 5 and 6 and in claims 1 and 3 as first filed. The administration of the agent is disclosed in the specification (e.g., abstract; pp. 1, 2, 5-7, 8,

11, 12, 14-15; examples 8 and 9; claims 1 and 24-25). The imaging of the subject after the administration of the agent is also disclosed (e.g., p. 1 ("media adapted for injections into living bodies, e.g. for the purpose of ultrasonic echography . . . compositions are mostly usable as contrast agents in ultrasonic echography to image the inside of blood-stream vessels and other cavities of living beings, e.g. human patients and animals"), 2 ("injecting into blood stream of living bodies suspensions of gas microbubbles . . . in a carrier liquid will strongly reinforce ultrasonic echography imaging, thus aiding in the visualization of internal organs"), examples 8 and 9).

Support for new claim 70 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The  $C_4F_8$  is disclosed at page 11(generally), example 5 and claims 1 and 3 as first filed. The administration of the agent is disclosed in the specification (e.g., abstract; pp. 1, 2, 5-7, 8, 11, 12, 14-15; examples 8 and 9; claims 1 and 24-25). The imaging of the subject after the administration of the agent is also disclosed (e.g., p. 1 ("media adapted for injections into living bodies, e.g. for the purpose of ultrasonic echography . . . compositions are mostly usable as contrast agents in ultrasonic echography to image the inside of blood-stream vessels and other cavities of living beings, e.g. human patients and animals"), 2 ("injecting into blood stream of living bodies suspensions of gas microbubbles . . . in a carrier liquid will

strongly reinforce ultrasonic echography imaging, thus aiding in the visualization of internal organs"), examples 8 and 9).

Support for new claim 71 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The  $C_4F_{10}$  is disclosed at page 11 (generally), example 5 and claims 1 and 3 as first filed. The administration of the agent is disclosed in the specification (e.g., abstract; pp. 1, 2, 5-7, 8, 11, 12, 14-15; examples 8 and 9; claims 1 and 24-25). The imaging of the subject after the administration of the agent is also disclosed (e.g., p. 1 ("media adapted for injections into living bodies, e.g. for the purpose of ultrasonic echography . . . compositions are mostly usable as contrast agents in ultrasonic echography to image the inside of blood-stream vessels and other cavities of living beings, e.g. human patients and animals"), 2 ("injecting into blood stream of living bodies suspensions of gas microbubbles . . . in a carrier liquid will strongly reinforce ultrasonic echography imaging, thus aiding in the visualization of internal organs"), examples 8 and 9).

Support for new claim 72 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant

comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The  $\text{CF}_4$  is disclosed at page 11(generally), examples 4, 5 and 6 and claims 1 and 3 as first filed. The administration of the agent is disclosed in the specification (e.g., abstract; pp. 1, 2, 5-7, 8, 11, 12, 14-15; examples 8 and 9; claims 1 and 24-25). The imaging of the subject after the administration of the agent is also disclosed (e.g., p. 1 ("media adapted for injections into living bodies, e.g. for the purpose of ultrasonic echography . . . compositions are mostly usable as contrast agents in ultrasonic echography to image the inside of blood-stream vessels and other cavities of living beings, e.g. human patients and animals"), 2 ("injecting into blood stream of living bodies suspensions of gas microbubbles . . . in a carrier liquid will strongly reinforce ultrasonic echography imaging, thus aiding in the visualization of internal organs"), examples 8 and 9).

Support for new claim 73 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The  $\text{SF}_6$ ,  $\text{C}_4\text{F}_8$ ,  $\text{C}_4\text{F}_{10}$ , or  $\text{CF}_4$  are disclosed at page 11 (generally) and claims 1 and 3 as first filed. The administration of the agent is disclosed in the specification (e.g., abstract; pp. 1, 2, 5-7, 8, 11, 12, 14-15; examples 8 and 9; claims 1 and 24-25). The imaging of the subject after the administration of the agent is also disclosed (e.g., p. 1 ("media adapted for

injections into living bodies, e.g. for the purpose of ultrasonic echography . . . compositions are mostly usable as contrast agents in ultrasonic echography to image the inside of blood-stream vessels and other cavities of living beings, e.g. human patients and animals"), 2 ("injecting into blood stream of living bodies suspensions of gas microbubbles . . . in a carrier liquid will strongly reinforce ultrasonic echography imaging, thus aiding in the visualization of internal organs"), examples 8 and 9).

Support for new claim 74 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The "physiologically acceptable gas" is disclosed both generally and with specific examples on page 11, in examples 1, 2 and 7 and in claims 1 and 3 as first filed. The '710 application is directed to administering compositions of microballoons (e.g., pp. 1 (defines microballoon), 3 and 6; examples 1, 2 and 7; claim 1) for ultrasonic imaging (e.g., abstract; pp. 1 ("injected into living beings, for instance for ultrasonic echography"), 6; examples 1, 2 and 7; claims 1 and 14). The '710 also discloses the use of the agents for ultrasonic imaging after their administration (e.g., abstract; pp. 1, 6; examples 1, 2 and 7; claims 1 and 14).

Support for new claim 75 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is

specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The "physiologically acceptable gas" is disclosed both generally and with specific examples on page 11, in examples 1, 2 and 7 and in claims 1 and 3 as first filed and "halogenated hydrocarbon" is disclosed at page 11 ("halogenated hydrocarbon"), in claims 1 and 3 as first filed. The '710 application is directed to administering compositions of microballoons (e.g., pp. 1 (defines microballoon), 3 and 6; examples 1, 2 and 7; claim 1) for ultrasonic imaging (e.g., abstract; pp. 1 ("injected into living beings, for instance for ultrasonic echography"), 6; examples 1, 2 and 7; claims 1 and 14). The '710 also discloses the use of the agents for ultrasonic imaging after their administration (e.g., abstract; pp. 1, 6; examples 1, 2 and 7; claims 1 and 14).

Support for new claim 76 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The "physiologically acceptable fluorinated gas" is disclosed both generally and with specific examples on page 11, in examples 1, 2 and 7 and in claims 1 and 3 as first filed and "freon" is disclosed at page 11 ("freon") claims 1 and 3 as first filed. The '710 application is directed to administering compositions of microballoons (e.g., pp. 1 (defines microballon), 3 and 6; examples 1, 2 and 7; claim 1) for ultrasonic imaging (e.g., abstract; pp. 1 ("injected into living beings, for instance for ultrasonic echography"), 6; examples 1, 2 and 7; claims 1

and 14). The '710 also discloses the use of the agents for ultrasonic imaging after their administration (e.g., abstract; pp. 1, 6; examples 1, 2 and 7; claims 1 and 14).

Support for new claim 77 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The  $\text{SF}_6$  is disclosed on page 11, in examples 1, 2 and 7 and in claims 1 and 3 as first filed. The '710 application is directed to administering compositions of microballoons (e.g., pp. 1 (defines microballon), 3 and 6; examples 1, 2 and 7; claim 1) for ultrasonic imaging (e.g., abstract; pp. 1 ("injected into living beings, for instance for ultrasonic echography"), 6; examples 1, 2 and 7; claims 1 and 14). The '710 also discloses the use of the agents for ultrasonic imaging after their administration (e.g., abstract; pp. 1, 6; examples 1, 2 and 7; claims 1 and 14).

Support for new claim 78 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The  $\text{C}_4\text{F}_8$  is disclosed on page 11 and in claims 1 and 3 as first filed. The '710 application is directed to administering compositions of microballoons (e.g., pp. 1 (defines microballon), 3 and 6; examples 1, 2 and 7; claim 1) for ultrasonic imaging (e.g., abstract; pp. 1 ("injected into living beings, for instance for ultrasonic echography"), 6; examples 1, 2 and 7; claims 1 and

14). The '710 also discloses the use of the agents for ultrasonic imaging after their administration (e.g., abstract; pp. 1, 6; examples 1, 2 and 7; claims 1 and 14).

Support for new claim 79 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The  $C_4F_{10}$  is disclosed at page 11 (generally), and claims 1 and 3 as first filed. The '710 application is directed to administering compositions of microballoons (e.g., pp. 1 (defines microballon), 3 and 6; examples 1, 2 and 7; claim 1) for ultrasonic imaging (e.g., abstract; pp. 1 ("injected into living beings, for instance for ultrasonic echography"), 6; examples 1, 2 and 7; claims 1 and 14). The '710 also discloses the use of the agents for ultrasonic imaging after their administration (e.g., abstract; pp. 1, 6; examples 1, 2 and 7; claims 1 and 14).

Support for new claim 80 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The  $CF_4$  is disclosed at page 11 (generally), example 1, and claims 1 and 3 as first filed. The '710 application is directed to administering compositions of microballoons (e.g., pp. 1 (defines microballon), 3 and 6; examples 1, 2 and 7; claim 1) for ultrasonic imaging (e.g., abstract; pp. 1 ("injected into living beings, for instance for ultrasonic echography"), 6; examples 1, 2



and 7; claims 1 and 14). The '710 also discloses the use of the agents for ultrasonic imaging after their administration (e.g., abstract; pp. 1, 6; examples 1, 2 and 7; claims 1 and 14).

Support for new claim 81 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The SF<sub>6</sub>, C<sub>4</sub>F<sub>8</sub>, C<sub>4</sub>F<sub>10</sub>, or CF<sub>4</sub> are disclosed at page 11(generally) and claims 1 and 3 as first filed. The '710 application is directed to administering compositions of microballoons (e.g., pp. 1 (defines microballoon), 3 and 6; examples 1, 2 and 7; claim 1) for ultrasonic imaging (e.g., abstract; pp. 1 ("injected into living beings, for instance for ultrasonic echography"), 6; examples 1, 2 and 7; claims 1 and 14). The '710 also discloses the use of the agents for ultrasonic imaging after their administration (e.g., abstract; pp. 1, 6; examples 1, 2 and 7; claims 1 and 14).

Support for new claim 82 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The "physiologically acceptable fluorinated gas" is disclosed both generally and with specific examples on page 11, in examples 4, 5 and 6 and in claims 1 and 3 as first filed. The '710 application discloses that its stabilized microbubbles may be formed in the presence of a

physiologically acceptable gas (e.g., "contact the dry surfactant in lamellar or thin film form with air or an adsorbable or entrappable gas before introducing said surfactant into the liquid carrier phase," p. 8). Considerable disclosure on this part of the claim is found at pages 6-10 and 12-13 of the '710 and its examples.

Support for new claim 83 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The "physiologically acceptable gas" is disclosed both generally and with specific examples on page 11, in examples 4, 5 and 6 and in claims 1 and 3 as first filed and the "halogenated hydrocarbon" is disclosed at page 11 ("halogenated hydrocarbon"), in examples 4, 5, 6 as first filed and claims 1 and 3 as first filed. The '710 application discloses that its stabilized microbubbles may be formed in the presence of a physiologically acceptable gas (e.g., "contact the dry surfactant in lamellar or thin film form with air or an adsorbable or entrappable gas before introducing said surfactant into the liquid carrier phase," p. 8). Considerable disclosure on this part of the claim is found at pages 6-10 and 12-13 of the '710 and its examples.

Support for new claim 84 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of

the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The "physiologically acceptable fluorinated gas" is disclosed both generally and with specific examples on page 11, in examples 4, 5 and 6 and in claims 1 and 3 as first filed and the "freon" is disclosed at page 11 ("freon"), in examples 4, 5, 6 as first filed and claims 1 and 3 as first filed. The '710 application discloses that its stabilized microbubbles may be formed in the presence of a physiologically acceptable gas (e.g., "contact the dry surfactant in lamellar or thin film form with air or an adsorbable or entrappable gas before introducing said surfactant into the liquid carrier phase," p. 8). Considerable disclosure on this part of the claim is found at pages 6-10 and 12-13 of the '710 and its examples.

Support for new claim 85 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The  $\text{SF}_6$  is disclosed on page 11, in examples 4, 5 and 6 and in claims 1 and 3 as first filed. The '710 application discloses that its stabilized microbubbles may be formed in the presence of a physiologically acceptable gas (e.g., "contact the dry surfactant in lamellar or thin film form with air or an adsorbable or entrappable gas before introducing said surfactant into the liquid

carrier phase," p. 8). Considerable disclosure on this part of the claim is found at pages 6-10 and 12-13 of the '710 and its examples.

Support for new claim 86 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The  $C_4F_8$  is disclosed at page 11(generally), example 5 and claims 1 and 3 as first filed. The '710 application discloses that its stabilized microbubbles may be formed in the presence of a physiologically acceptable gas (e.g., "contact the dry surfactant in lamellar or thin film form with air or an adsorbable or entrappable gas before introducing said surfactant into the liquid carrier phase," p. 8). Considerable disclosure on this part of the claim is found at pages 6-10 and 12-13 of the '710 and its examples.

Support for new claim 87 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The  $C_4F_{10}$  is disclosed at page 11 (generally), example 5 and claims 1 and 3 as first filed. The '710 application discloses that its stabilized microbubbles may be formed in the presence of a

physiologically acceptable gas (e.g., "contact the dry surfactant in lamellar or thin film form with air or an adsorbable or entrappable gas before introducing said surfactant into the liquid carrier phase," p. 8). Considerable disclosure on this part of the claim is found at pages 6-10 and 12-13 of the '710 and its examples.

Support for new claim 88 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The  $\text{CF}_4$  is disclosed at page 11(generally), examples 4, 5 and 6 and claims 1 and 3 as first filed. The '710 application discloses that its stabilized microbubbles may be formed in the presence of a physiologically acceptable gas (e.g., "contact the dry surfactant in lamellar or thin film form with air or an adsorbable or entrappable gas before introducing said surfactant into the liquid carrier phase," p. 8). Considerable disclosure on this part of the claim is found at pages 6-10 and 12-13 of the '710 and its examples.

Support for new claim 89 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of stabilized microbubbles" is found specifically at pages 1, 6 and 7 of the specification and in examples 4, 5 and 6. The use of a "film-forming surfactant comprising one or more phospholipids" in these agents is disclosed on pages 6 and 7 of the specification, examples 4, 5 and 6 and in claims 1, 5, 6, 7, 8, 16 and 17 as first filed. The

SF<sub>6</sub>, C<sub>4</sub>F<sub>8</sub>, C<sub>4</sub>F<sub>10</sub>, or CF<sub>4</sub> are disclosed at page 11 (generally) and claims 1 and 3 as first filed. The '710 application discloses that its stabilized microbubbles may be formed in the presence of a physiologically acceptable gas (e.g., "contact the dry surfactant in lamellar or thin film form with air or an adsorbable or entrappable gas before introducing said surfactant into the liquid carrier phase," p. 8). Considerable disclosure on this part of the claim is found at pages 6-10 and 12-13 of the '710 and its examples.

Support for new claim 90 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The "physiologically acceptable fluorinated gas" is disclosed both generally and with specific examples on page 11, in examples 1, 2 and 7 and in claims 1 and 3 as first filed. The '710 application discloses that its microballoons may be formed in the presence of a physiologically acceptable gas or gas mixture (e.g., pp. 7 ("in presence of any suitable gas") and 8 ("dry powder under an atmosphere of a gas," "in the presence of the desired gas")) or by filling pre-formed microballoons with a gas or gas mixture (e.g, pp. 6, 7 ("replacing this gas originally used . . . for preparing the microvesicles . . .") and 8-9). Considerable disclosure on this part of the claim is found at pages 6-9 of the '710 application and in examples 1, 2 and 7.

Support for new claim 91 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an

aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The "physiologically acceptable gas" is disclosed both generally and with specific examples on page 11, in examples 1, 2 and 7 and in claims 1 and 3 as first filed and "halogenated hydrocarbon" is disclosed at page 11 ("halogenated hydrocarbon"), in claims 1 and 3 as first filed. The '710 application discloses that its microballoons may be formed in the presence of a physiologically acceptable gas or gas mixture (e.g., pp. 7 ("in presence of any suitable gas") and 8 ("dry powder under an atmosphere of a gas," "in the presence of the desired gas")) or by filling pre-formed microballoons with a gas or gas mixture (e.g, pp. 6, 7 ("replacing this gas originally used . . . for preparing the microvesicles . . .") and 8-9). Considerable disclosure on this part of the claim is found at pages 6-9 of the '710 application and in examples 1, 2 and 7.

Support for new claim 92 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The "physiologically acceptable fluorinated gas" is disclosed both generally and with specific examples on page 11, in examples 1, 2 and 7 and in claims 1 and 3 as first filed and "freon" is disclosed at page 11 ("freon") claims 1 and 3 as first filed. The '710 application discloses that its microballoons may be formed in the presence of a physiologically

acceptable gas or gas mixture (e.g., pp. 7 ("in presence of any suitable gas") and 8 ("dry powder under an atmosphere of a gas," "in the presence of the desired gas")) or by filling pre-formed microballoons with a gas or gas mixture (e.g, pp. 6, 7 ("replacing this gas originally used . . . for preparing the microvesicles . . .") and 8-9). Considerable disclosure on this part of the claim is found at pages 6-9 of the '710 application and in examples 1, 2 and 7.

Support for new claim 93 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The SF<sub>6</sub> is disclosed on page 11, in examples 1, 2 and 7 and in claims 1 and 3 as first filed. The '710 application discloses that its microballoons may be formed in the presence of a physiologically acceptable gas or gas mixture (e.g., pp. 7 ("in presence of any suitable gas") and 8 ("dry powder under an atmosphere of a gas," "in the presence of the desired gas")) or by filling pre-formed microballoons with a gas or gas mixture (e.g, pp. 6, 7 ("replacing this gas originally used . . . for preparing the microvesicles . . .") and 8-9). Considerable disclosure on this part of the claim is found at pages 6-9 of the '710 application and in examples 1, 2 and 7.

Support for new claim 94 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6



of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The  $C_4F_8$  is disclosed on page 11 and in claims 1 and 3 as first filed. The '710 application discloses that its microballoons may be formed in the presence of a physiologically acceptable gas or gas mixture (e.g., pp. 7 ("in presence of any suitable gas") and 8 ("dry powder under an atmosphere of a gas," "in the presence of the desired gas")) or by filling pre-formed microballoons with a gas or gas mixture (e.g, pp. 6, 7 ("replacing this gas originally used . . . for preparing the microvesicles . . .") and 8-9). Considerable disclosure on this part of the claim is found at pages 6-9 of the '710 application and in examples 1, 2 and 7.

Support for new claim 95 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The  $C_4F_{10}$  is disclosed at page 11 (generally), and claims 1 and 3 as first filed. The '710 application discloses that its microballoons may be formed in the presence of a physiologically acceptable gas or gas mixture (e.g., pp. 7 ("in presence of any suitable gas") and 8 ("dry powder under an atmosphere of a gas," "in the presence of the desired gas")) or by filling pre-formed microballoons with a gas or gas mixture (e.g, pp. 6, 7 ("replacing this gas originally used . . . for preparing the microvesicles . . .") and 8-9). Considerable disclosure on this part of the claim is found at pages 6-9 of the '710 application and in examples 1, 2 and 7.

Support for new claim 96 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The  $\text{CF}_4$  is disclosed at page 11(generally), example 1, and claims 1 and 3 as first filed. The '710 application discloses that its microballoons may be formed in the presence of a physiologically acceptable gas or gas mixture (e.g., pp. 7 ("in presence of any suitable gas") and 8 ("dry powder under an atmosphere of a gas," "in the presence of the desired gas")) or by filling pre-formed microballoons with a gas or gas mixture (e.g, pp. 6, 7 ("replacing this gas originally used . . . for preparing the microvesicles . . .") and 8-9). Considerable disclosure on this part of the claim is found at pages 6-9 of the '710 application and in examples 1, 2 and 7.

Support for new claim 97 is found throughout the '710 specification and claims as first filed (e.g., claim 1). For example, a description of the "contrast agent comprising an aqueous suspension of gas-filled microballoons" is found specifically at pages 1, 2-3, and 6 of the specification and in examples 1, 2 and 7. The "polymer membrane wall" is specifically disclosed at pages 1 and 2-3 and in claims 9 and 10 as filed. The  $\text{SF}_6$ ,  $\text{C}_4\text{F}_8$ ,  $\text{C}_4\text{F}_{10}$ , or  $\text{CF}_4$  are disclosed at page 11(generally) and claims 1 and 3 as first filed. The '710 application discloses that its microballoons may be formed in the presence of a physiologically acceptable gas or gas mixture (e.g., pp. 7 ("in presence of any suitable gas") and 8 ("dry powder under an atmosphere of a gas," "in the presence of the desired gas")) or

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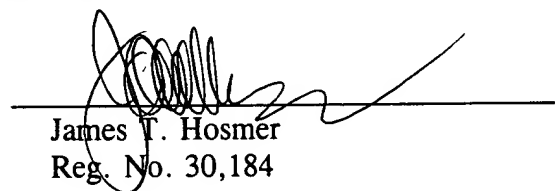
by filling pre-formed microballoons with a gas or gas mixture (e.g, pp. 6, 7 ("replacing this gas originally used . . . for preparing the microvesicles . . .") and 8-9). Considerable disclosure on this part of the claim is found at pages 6-9 of the '710 application and in examples 1, 2 and 7.

These new claims (i.e., claims 50-97) are believed to be patentable because (1) they are supported in the specification as shown supra, and (2) Applicants are not aware of any prior art that would render them unpatentable. To Applicants' knowledge, there is no prior art that discloses all of the elements of these claims and no combination of the prior art that discloses the claimed inventions. Applicants respectfully request that this amendment be entered and that this application and these claims be included in the interferences identified above.

Respectfully submitted,

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